Book Reviews

Getting Through to the Other Side

Strategic Persuasion. Arms Limitations through Dialogue. Jeremy J. Stone. Columbia University Press, New York, 1967. xvi + 176 pp. \$6.95.

This book is testimony to the impotence of traditional diplomatic practices in an era of rapid technological change. Jeremy Stone is the author of an earlier work, Containing the Arms Race, a study of possible international agreements to limit strategic armaments. In this new work he observes that, in practice, we are unlikely to achieve such restraints through the conventional route of negotiated treaties. Military technology evolves far too swiftly to be accommodated by the ponderous processes of international diplomacy, and if the arms competition is to be contained, it must be contained in the absence of formal agreements.

Each side must then be prepared to accept some self-imposed restrictions on its arms procurement. For the past three years the United States has refrained from increasing its inventory of missile launchers, hoping to persuade the Soviet Union to exercise a similar unilateral restraint. (In fact, judging from the absence of public proposals to this effect, the United States may be unwilling to see this restraint actually written into a formal agreement.) Similarly, for a number of years we withheld a decision to deploy a ballistic missile defense, hoping that the Soviet Union would agree to some limit on these destabilizing weapons. Both these restraints seem to have failed—the Soviet Union is continuing to expand its missile force, and we have now begun to deploy a missile defense, after the Russians made a modest beginning in this direction themselves (around one city, Moscow).

Though Stone suggests that arms limitations may be achieved through "strategic dialogue . . . the total flow of communications between the two sides on matters of strategy and arms control," his book can help us under-

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stand why it is much more likely that such attempts will fail. He describes the many barriers to successful international communication, including differing perceptions of national goals and the difficulties we all have in understanding the positions of others as they see them and adjusting our own positions accordingly. The special problems of communication between governments are stressed in a sophisticated discussion of the rigidity, suspicion of change, and depth of doctrinal commitment that characterize large bureaucracies. Their attitudes can be changed, but, as Stone aptly notes, they must be "infected by new thoughts rather than overcome by them."

In talking about specific ways in which the dialogue can take place, Stone is on weaker ground, largely because he is examining the dialogue between governments as an outsider. He discusses in particular the Pugwash Conferences, which, in our relations with the Soviet Union, are the only forum in which there has been any continuing dialogue on strategic questions. His discussion cannot disguise the fact that, on the evidence available thus far, these have not been very productive in affecting the policies of the two sides. The Pugwash meetings have been valuable to the scientists involved, in developing a sense of international community and establishing communications where other media have broken down. But the connection of these meetings with the policy process of government has always been tenuous. Only diplomats can directly relay government positions and force a review of existing policies. Discussions among professional men can be more open and freewheeling, but they have correspondingly less direct impact on policy. On the other hand, this freedom of discourse can be of great value in particular situations, especially when conceptual barriers separate the two sides and clarification of the issues is an essential prelude to negotiations.

Stone also discusses long-distance forms of communication, by means of public announcements and physical demonstrations of military capability and intent (he calls this "pantomime"). Differences in perception show up most strikingly here. The acts of any country can always be interpreted as having an offensive or a defensive motivation, and any act will, at least initially, be interpreted by another country so as to reinforce its preexisting conceptions. When the Soviet Union organizes a civil defense program, is it buttressing the defensive posture which has long characterized Soviet military planning? Or is it attempting to place itself in a better position from which it can carry out offensive military actions? If one intends to alter perceptions and diminish hostility, unilateral actions may be the poorest form of communication.

Nor are public statements a very effective means of international communication. No two countries view strategic questions in the same way, and in the case of the United States and the Soviet Union there are especially marked social and historical differences which lead to quite divergent perceptions of the strategic situation.

It must also be recognized that what Stone terms a "dialogue" more closely resembles a monologue, with very few pronouncements on strategic matters emanating from the Soviet Union. The United States has been trying for years to achieve greater communication on strategic matters with the Soviet Union, but these attempts seem largely to have failed. For instance, for the past few years the Soviet Union has been carrying out extensive activity related to air and missile defense, and yet we remain essentially ignorant of why they are constructing the installations we detect. This has shown itself in the dispute over whether a large network they are building, which we have dubbed the "Tallinn system," is an air defense or a missile defense system, and in the continuing uncertainty over how far they plan to go in building the missile defense system which they have begun around Moscow.

Intelligence Agencies

Finally, Stone's discussion suffers from a most important, but perhaps inevitable, limitation. He refers almost solely to open communication between the two sides and to the ways in which these public signals are perceived by national decision-makers. However, nearly all the information available to

the leaders of major governments about the actions of foreign countries comes to them through their intelligence agencies. The filtering that takes place as the information passes through these channels crucially affects the impact which the words and deeds of one country will have on another.

Since intelligence agencies share the failings of any bureaucracy, there is likely to be substantial distortion in the signal received. In fact, it is doubtful whether one can really understand the dialogue between nations without a thorough (and hence essentially impossible) study of the operation of intelligence agencies as analytical and information-processing organs for national leaders. Even in the absence of detailed knowledge of this process, one generalization is probably safe: It is unlikely that the interposition of intelligence agencies between the leaders of one country and those of another will facilitate a change in the attitudes of either country, or enhance the chances for "strategic persuasion."

If the dialogue between nations has all these limitations, what can be expected from it in achieving some measure of arms control? Undoubtedly, very little. The arms race is fueled by pressures to procure the weapons emerging from well-financed military research and development programs. If there is to be a significant limit on armaments, each government must act on its own to resist these pressures. Thanks to improvements in intelligence-gathering techniques (primarily through the use of space-borne detectors), there is now sufficient information available to each side to permit such unilateral

This opportunity for restraint is particularly clear in the case of the United States, which is, by a large margin, the dominant military power in the world today and the one most able, if it wishes, to retard the arms race through its own actions. At every stage in the arms race, as new technology has been introduced, we have been leading the way-as Jerome Wiesner has commented, we have been running an arms race with ourselves. Eventually the Soviet Union matches whatever new weapons development we have undertaken, but the pattern of U.S. "leadership" in the arms race seems clear, from the introduction two decades ago of the intercontinental bomber to the current emphasis on missile penetration aids and multiple warheads.

The United States has recently de-

cided to construct a ballistic missile defense, proclaimed in a series of official speeches as a defense against Chinese attack. It is declared to be no threat to the Soviet Union since, while taking this step, we still hope to avoid a new and costly round in the Soviet-American arms race. However, it is questionable indeed whether the Russians will take our assertions at face value, or whether they can afford to wait until the system is deployed to decide if they must respond to it.

If we do want to restrain the arms race, we cannot assume that the dialogue will be effective and that our messages will be received and understood in the way we intend. Rather than rely on the Soviet Union to perceive our signals accurately, we would be far better advised to rely on our own unilateral restraint to prevent a costly and dangerous offense-defense race. While a formal treaty to accomplish this is only a remote possibility, and restraint through dialogue seems only a slender hope, arms limitation through unilateral restraint and United States leadership could, if we willed it, become a real possibility.

LEONARD S. RODBERG Department of Physics and Astronomy, University of Maryland, College Park

Mechanisms of Behavior

Instinct and Intelligence. Behavior of Animals and Man. S. A. BARNETT. Prentice-Hall, Englewood Cliffs, N.J., 1967. xiv + 224 pp., illus. \$6.95. Prentice-Hall Series in Nature and Natural History.

The rediscovery of the world of animal behavior by 20th-century biologists and psychologists has given rise to a considerable number of technical books. The field of study is vast and diverse, and new enough in its relation to modern biology that our understanding of the phenomena which it encompasses is quite rudimentary. Such a state of partial understanding is most conducive to book writing. Far from being objectionable, this state of affairs has a salutary effect on a developing field. In time, as natural selection operates in the world of books, there will undoubtedly emerge a small number of definitive works. In the meantime, the interested reader is presented with a smorgasbord of volumes each of which has something different to say, each of which reflects the prejudices of its author more starkly

than might be expected in a more mature discipline.

Inevitably the words "instinct" and "intelligence" appear somewhere in each of these books. The terms are so fraught with potential misunderstanding and prejudice that it requires a measure of courage to employ them, as Barnett has done, in a title. As a matter of fact he apologizes in the preface and hastens to say that he does not use them as technical terms with precise meanings. He goes on to remark, however, that they do denote topics of study, that the phenomena comprehended under these headings are real. The phenomena to which he refers are species-specific action patterns and drive on the one hand and adaptable behavior on the other. In the sense that all behavior falls somewhere within this broad spectrum the title is apt, and it enables laymen (for whom the book is intended) and professionals alike to form a correct idea immediately of the subject matter of the book even without the subtitle to guide them. Except for accounts in three short chapters toward the end, the concepts of instinct and intelligence are not dealt with directly.

The principal theme is the analysis of behavior by experiment. It begins with a statement of the problem: What are the mechanisms of behavior? Of what use to the individuals or species is the behavior? Barnett warns briefly that one must take account of other species (other than man, that is) as they actually are, not impute to them cleverness that they lack yet not deny them their true, remarkable abilities because we see them as possessing only our kind of senses. This introduction leads into a very brief mention of nerves, senses, and stimulus and response, and the observation that animals have in common the ability to move about. From here the discussion flows naturally into considerations of taxes, kineses, migrations, search, and exploration. Sixty-five pages are now devoted to the subjects of herding, dispersion, threat, submission, peck orders, social stress, courtship and family, social insects, communication and society. A succeeding short chapter on heredity and environment suffers from being too succinct for the breadth of the subject and the subtlety of the arguments presented—seven pages cover Darwinian and Lamarckian accounts of the evolution of behavior, the problem of Nature and Nurture, and the meaning of the word "inherited." It is doubtful that the average reader will be able to appreciate the distinction between in-